

AMENDMENTS

In the Claims:

1. (Currently Amended) A hip prosthesis configured for cementless implantation comprising a shaft configured to be inserted into a femur and a femoral neck extending medially relative to an implanted position of the prosthesis in the femur, the shaft having a proximal part configured to be inserted in a metaphyseal region of the femur and a distal part configured to be inserted into a diaphyseal region of the femur, the proximal part comprising fins that project from front and rear faces of the proximal part, each fin extending from a distal end of the proximal part to a proximal end of the proximal part and having a steep medial flank oriented in a medial direction relative to the implanted position, the steep medial flank enclosing an angle between 5° and 15° with respect to a longitudinal axis of the shaft, the width of the fins increasing from the distal end to the proximal end of the proximal part, the height of the fins decreasing in a lateral direction, relative to the implanted position and perpendicular to [[a]] the longitudinal axis of the shaft, from the medial edge, the distal part comprising diaphyseal anchoring projections.

2. (Previously Presented) The prosthesis as claimed in claim 1, wherein the fins extend rectilinearly.

3. (Previously Presented) The prosthesis as claimed in claim 1 or 2, wherein the height of the fins above the surface of the shaft increases from the distal end to the proximal end of the proximal part.

4. (Previously Presented) The prosthesis as claimed in claim 1 or 2, wherein the height of the lateral edge of the fins is not greater than half the height of the medial edge.

5. (Previously Presented) The prosthesis as claimed in claim 1 or 2, further comprising a device for anchoring the endoprosthesis to a diaphysis.

6. (Previously Presented) The prosthesis as claimed in claim 3, wherein the height of the lateral edge of the fins is not greater than half the height of the medial edge.

7. (Previously Presented) The prosthesis as claimed in claim 3, further comprising a device for anchoring the endoprosthesis to a diaphysis.

8. (Previously Presented) The prosthesis as claimed in claim 4, further comprising a device for anchoring the endoprosthesis to a diaphysis.